



Agenda Date: 06/09/04  
Agenda Item: 2B & 2C

**STATE OF NEW JERSEY**  
**Board of Public Utilities**  
**Two Gateway Center**  
**Newark, NJ 07102**  
**www.bpu.state.nj.us**

**ENERGY**

IN THE MATTER OF THE FOCUSED AUDIT )	ORDER ACCEPTING REPORTS
OF PLANNING, OPERATIONS, AND )	AND ADOPTING STIPULATION
MAINTENANCE PRACTICES, POLICIES AND )	OF SETTLEMENT
PROCEDURES OF JERSEY CENTRAL )	
POWER & LIGHT COMPANY )	DOCKET NO. EX02120950
IN THE MATTER OF THE BOARD'S )	
INVESTIGATION INTO JERSEY CENTRAL )	
POWER & LIGHT'S OUTAGES OF THE )	
JULY 4, 2003 WEEKEND )	DOCKET NO. EX03070503

(SERVICE LIST ATTACHED)

BY THE BOARD:

The Board of Public Utilities ("the Board") is empowered to ensure that regulated public utilities provide safe, adequate and proper service to the citizens of New Jersey. N.J.S.A. 48:2-23. Jersey Central Power & Light Company ("JCP&L" or "the Company"), a subsidiary of the Ohio-based FirstEnergy Corporation, is an electric public utility subject to the jurisdiction of the Board. The Board is vested with the authority, pursuant to N.J.S.A. 48:2-19, to investigate any public utility, and pursuant to N.J.S.A. 48:2-16 and 48:2-40, to issue Orders to public utilities.

**Background**

On August 2, 2002, severe thunderstorms resulted in approximately 180,000 electric customer outages in JCP&L's Central New Jersey Region. Approximately 40,000 customers were without electricity for over three days, and the total restoration was not completed until five days after the storm. By Docket No. EX02120950, the Board initiated an investigation into the storm-related outages. On February 18, 2003, Board Staff and JCP&L signed a Stipulation and Agreement of Settlement ("the 2003 Stipulation") in Docket No. EX02120950. On March 13, 2004, the Board adopted Board Staff's report. Item 8 of the 2003 Stipulation provided for Board Staff to conduct a review and focused audit of the Company's planning and operations and maintenance programs and practices, its compliance with previous investigations and Board Regulations and applicable statutes. On March 3, 2003, the Board issued an Order directing Board Staff to undertake a focused audit of JCP&L's planning, operations and maintenance practices. On September 24, 2003, the Board retained Booth & Associates, Inc. ("Booth"), to perform said focused audit.

On Saturday afternoon, July 5, 2003, JCP&L experienced a series of 34.5 kV sub-transmission line faults, which caused interruptions in service in Seaside Heights, Lavallette, Seaside Park, Mantoloking, Ocean Beach and Ortley Beach. At the request of Governor James E. McGreevey, and as a result of the July 4<sup>th</sup> weekend outages in the communities located on the peninsula, and in order to assure safe, adequate and proper service, pursuant to N.J.S.A. 48:2-23, the Board on July 16, 2003 issued an Order Directing the Implementation of Corrective Measures and Investigation, Docket No. EX03070503 ("the July 16 Order"). In the July 16 Order, in addition to ordering various short-term remediation measures, the Board directed the Company to preserve certain equipment for forensic examination, an examination which is now completed. Lastly, the Board initiated an investigation into the cause of the outages. The underlying and immediate causes of these outages are set out in detail in the Order Directing the Implementation of Corrective Measures, Docket. No. EX03070503, dated December 17, 2003 ("the Interim Order").

As part of that investigation, the July 16 Order directed that a Special Reliability Master ("the SRM") be hired to oversee JCP&L's maintenance and performance standards and to make recommendations to the Board on the appropriate courses of action necessary to ensure system-wide reliability. The Board ordered JCP&L to pay all associated costs and to provide its full cooperation to the SRM.

On August 1, 2003, Board Staff engaged Mr. Patrick Downes of P. J. Downes Associates, LLC, as SRM. Mr. Downes was given a dual assignment. Initially, he focused on the causes of the outages on the barrier peninsula and upon the steps taken by JCP&L to insure that they would not recur. That investigation and the resulting recommendations are set out in the report he submitted in December 2003 ("the Interim SRM Report"), which the Board adopted in its Interim Order. The eleven directives in the Interim Order have been initiated and are on schedule.

Subsequent to the adoption of the Interim Report, Board Staff and JCP&L, with the assistance of the SRM and Booth, worked together to create a Memorandum of Understanding ("the MOU") that set out additional specific tasks to be performed and a timetable for their performance before the 2004 Memorial Day weekend. The Board adopted the MOU in I/M/O Board's Investigation into JCP&L's Outages of the July 4, 2003 Weekend and the Focused Audit of JCP&L, Docket Nos. EX03070503 & EX02120950 (March 25, 2004). JCP&L has now implemented the actions covered in these orders.

On June 4, 2004, Booth submitted the Executive Summary and Recommendations of its report, entitled "Focused Audit of the Planning, Operations and Maintenance Practices, Policies and Procedures of Jersey Central Power & Light Company" ("the Booth Report"). The Booth Report addresses a number of areas with respect to JCP&L's entire distribution system including, but not limited to, infrastructure improvements, maintenance practices, load forecasting, outage management, workforce adequacy, and stray voltage. The Booth Report contains sixty-nine recommendations for improvement, prioritized into three categories. According to Booth, "Priority One" recommendations are those action items which should be implemented first and should be given the greatest consideration by both the Board and JCP&L. "Priority Two" recommendations are those action items that Booth believes will provide for enhancement to the system reliability, operations and safety, which will require a long-term implementation period and which have the same level of significance as Priority One items. "Priority Three" recommendations are those action items and recommendations that Booth asserts should be considered and implemented which, although they may or may not contribute directly to improved reliability in the near term, will have a positive long-term effect.

On June 7, 2004, the SRM submitted his final report, entitled "Final Report to the New Jersey Board of Public Utilities I/M/O The Board's Investigation Into JCP&L's Outages of the July 4, 2003 Weekend" ("the Final SRM Report"). While it contains two additional recommendations for improving the delivery system to the barrier peninsula, the Final SRM Report focuses primarily upon improvements needed for the total JCP&L delivery system, with 30 recommendations for system-wide improvements in the Company's submarine, underground and overhead facilities, and 3 recommendations concerning JCP&L's labor resources.

#### 2004 Stipulation

As discussed in both the Booth Report and the Final SRM Report (collectively, "the Reports"), both consultants conducted an intensive review and analysis of the Company's organization and operations, including document reviews, on-site inspections, and interviews with upper- and middle-level management as well as with bargaining unit employees. This information was then used in the preparation of the Reports, which contain analyses, findings and recommendations for improvement in JCP&L's distribution system reliability, particularly with regard to the need for managerial oversight. JCP&L was permitted an opportunity to review the Reports to correct any factual discrepancies, and to provide written comments concerning areas of disagreement which would be included with the Reports. In order to achieve a resolution of all issues, the Company, Board Staff, Booth and the SRM resolved through significant discussions and reviews of technical information those areas where JCP&L argued that it was unable to comply with the specific recommendations set forth in the reports. That resolution is embodied in the 2004 Stipulation, dated June 8, 2004 entered into between JCP&L and Board Staff, wherein the Company has agreed to implement all recommendations in the SRM report and, with some modifications, all recommendations in the Booth Report.

The 2004 Stipulation establishes the action and reporting commitments set forth below.

In regard to its distribution transformers, defined for purposes of this Order as power transformers served by 34.5 kV transmission lines, JCP&L will provide the reports listed below on an annual basis for five years, beginning March 31, 2005 and ending March 31, 2009.

1. With respect to preventative and corrective maintenance, the following reports concerning distribution transformer maintenance activities:
  - (a) Preventative Maintenance ("PM"): the number scheduled, the number completed, and the percentage of those scheduled that were actually completed. In addition, a comparison to the numbers scheduled and completed and the percentage of those scheduled actually completed in the prior year.
  - (b) Corrective Maintenance ("CM"): the number of CMs completed by categories of equipment and the number of total CM man-hours for the year. In addition, a comparison to the number of CMs by categories of equipment and total CM man-hours for the prior year.
  - (c) The number of replacements, retirements, and refurbishings of distribution transformers for the year and the comparison to the numbers replaced, the numbers retired, and the numbers refurbished in the prior year.

2. The results of the tests, inspections, PMs and CMs performed.
3. A list of the actions taken or planned on the basis of data from the above-referenced tests, inspections, PMs and CMs that shows tolerances or accepted ranges have been exceeded or incipient failure conditions revealed.
4. A schedule of the actions listed in item 3.
5. Reports of the actions listed in item 3 and scheduled in item 4 that have been completed.

For the next three years, JCP&L will provide the Board annually with a running three-year average transformer failure rate and also with the comparison of that failure rate to the national industry average failure rate, as defined at greater length in the Stipulation and its appendices. In the event that JCP&L'S failure rate exceeds the national average, the Company agrees to revise its distribution transformer loading guidelines and/or criteria to a more conservative loading level until the goals set out in the Stipulation are reached.

For the next three years, JCP&L will provide the Board with a list of distribution transformers that are projected to exceed the IEEE Moderate Loss of Life ("MLOL") rating under normal conditions. JCP&L will take appropriate action to relieve the loading on the distribution transformers so identified.

Over the course of five years, beginning as of January 1, 2004, JCP&L will budget \$12 million per year on distribution transformer-related capital investments, over and above the \$30 million it has committed to spending on reliability enhancements, as part of its implementation of its Asset Management Strategy.

JCP&L will also target achieving a Circuit Reliability Index ("CRI"), level of 130 or lower for 80% of its circuits within four years. Until such time as that goal is achieved, JCP&L will report annually on all its circuits, providing the annual average CRI rate by region as well as more specific data set out in the Stipulation.

#### Discussion and Findings

After carefully reviewing the record in this matter, the Board FINDS the Booth Report, chapters 1 and 12, the Final SRM Report, and the 2004 Stipulation to be a thorough and comprehensive effort by the Parties to identify and address opportunities for significant improvement to JCP&L's distribution system, both at the barrier peninsula and throughout the Company's entire service territory. These efforts, in addition to earlier actions taken by the Board in recent years to address reliability concerns, should provide JCP&L's customers with higher levels of reliability than have been experienced in the past. The Board notes that, according to the Booth Report, using the standard and customary electric utility industry methods, JCP&L is in the last quartile of service reliability comparisons in the electric utility industry. The Board expects a marked improvement in that statistic.

With respect to the July 4<sup>th</sup> weekend outages, the Board FINDS that the Company no longer needs to retain equipment from the affected area for regulatory investigative purposes as ordered by the Board in the July 16 Order.

Accordingly, the Board HEREBY ADOPTS, in its entirety, the 2004 Stipulation and ACCEPTS the Final SRM Report, copies of which are attached hereto and made a part hereof. At its June 9, 2004 Agenda Meeting, the Board accepted chapters 1 and 12 of the Booth Report, noting that chapters 2 through 11 would be released as soon as they were finalized.<sup>1</sup> Subsequently, the complete report, reflecting the contents of chapters 1 and 12, was finalized and submitted to the Board. The Board further notes that the 2004 Stipulation modifies certain aspects of the Booth Report and that, in these areas of modification, the 2004 Stipulation shall be the controlling document. The Board DIRECTS JCP&L and Board Staff to jointly develop a detailed implementation program for all recommendations set forth in the two reports no later than thirty days from the effective date of this Order. The Board further DIRECTS JCP&L to implement said recommendations in accordance with the implementation program; however, JCP&L's efforts to comply with the directives herein should not be delayed pending development of a detailed implementation program. The Board further DIRECTS the Company to notify Board Staff as soon as the Company is aware that it is unable to complete any of the commitments set forth in the Stipulation. The Board notes that, pursuant to the 2004 Stipulation and the Board Order, the Company may seek recovery for its reliability-related investments. Any recovery for these investments, however, shall be limited to those investments which the Company can prove are over and above its normal operating and maintenance budget and which are distinct from any investment in its transmission system subject to jurisdiction of the Federal Energy Regulatory Commission. Recovery is dependent upon implementation of the commitments set forth above.

In addition, it is necessary to address two additional issues: stray voltage and labor reporting requirements.

#### Stray Voltage

At the June 9, 2004 Agenda meeting, and in response to information in the Booth Report on stray voltage problems experienced by some of JCP&L's customers, the Board voted to authorize the following three actions:

1. The Board Secretary will send a letter to the National Fire Protection Association or to an organization with similar expertise regarding the manufacture of fiberglass pools. This letter will outline the stray voltage problems which may be experienced with fiberglass pools lacking a proper grid, as noted in the Booth Report, and ask the Association to explore construction methods to minimize this hazard.
2. Board Staff will contact the State agency having jurisdiction over the construction of swimming pools to explore the possibility of amending the applicable codes in order to add measures to avoid stray voltage.
3. Board Staff will meet, as appropriate, with the regional office of the National Spa and Pool Institute or equivalent organization to discuss the stray voltage concerns noted in the Booth Report and possible strategies for addressing them.

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<sup>1</sup>The Company's comments concerning the finalized Booth Report were filed with the Board on June 23, 2004. Pursuant to N.J.A.C. 14:3-12.4, the Company's comments are incorporated by reference into the Booth Report.


Labor Reporting Requirements

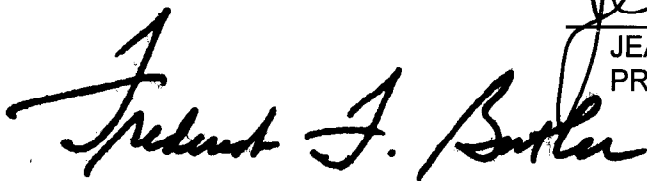
In the 2003 Stipulation of Settlement between Board Staff and the Company, the Company was required to submit monthly reports detailing the number of contractors and the number of bargaining unit employees used in critical job classifications. That reporting requirement ended with the acceptance of the Booth Report, but the information provided in those reports would still be useful to the Board, and the reporting requirement is HEREBY REINSTITUTED. Therefore, the Board ORDERS the Company to continue providing the reports formerly submitted under the 2003 Stipulation of Settlement on a monthly basis through December 31, 2005, and quarterly thereafter through December 31, 2008, unless otherwise notified by Board Staff.

Lastly, the Board wishes to stress the importance of a matter covered in the Booth Report and agreed to without modification by the Company, namely the importance of accomplishing a shift in the corporate culture at both FirstEnergy and JCP&L. The Booth Report noted that although FirstEnergy stressed as priorities both safety and the implementation of FirstEnergy "Best Practices" at JCP&L, neither of these was reflected in the actual system operation, maintenance and planning procedures observed by Booth. The Board believes that a cultural shift is necessary in order for the safety concerns and desire to implement FirstEnergy "Best Practices" articulated at upper management levels to become realities at the operational level.

DATED: 7/23/04


BOARD OF PUBLIC UTILITIES  
BY:

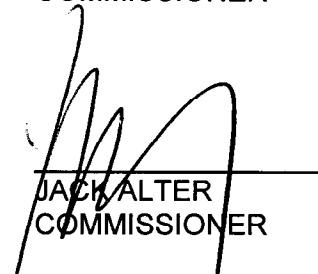
  
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SECRETARY

IN THE MATTER OF THE FOCUSED AUDIT OF PLANNING, OPERATIONS, AND  
MAINTENANCE PRACTICES, POLICIES AND PROCEDURES OF JERSEY CENTRAL  
POWER & LIGHT COMPANY - DOCKET NO. EX02120950

IN THE MATTER OF THE BOARD'S INVESTIGATION INTO JERSEY CENTRAL POWER &  
LIGHT'S OUTAGES OF THE JULY 4, 2003 WEEKEND - DOCKET NO. EX03070503

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